CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Sixty-ninth meeting of the Standing Committee
Geneva (Switzerland), 27 November -1 December 2017

Species specific matters

SNAKES (SERPENTES SPP.): REPORT OF THE SECRETARIAT

1. This document has been prepared by the Secretariat.

2. At its 17th meeting (CoP17, Johannesburg, 2016), the Conference of the Parties adopted Resolution Conf. 17.12 on *Conservation, sustainable use of and trade in snakes*, as well as several Decisions, including the following that require attention from the Standing Committee at the present meeting:

Decision 17.278

Directed to Parties

Parties should eliminate the important illegal and unreported trade in specimens, whether live or parts and derivatives, of CITES-listed snake species by:

a) ensuring that CITES permits and certificates are properly issued for trade in these specimens;

b) including information on trade in these specimens in their CITES annual reports;

c) ensuring that their annual reports are following the most recent version of the Guidelines for the preparation and submission of CITES annual reports, in compliance with Resolution Conf. 11.17 (Rev. CoP17) on National reports;

d) examining their enforcement efforts regarding trade in these specimens to ensure that adequate steps are taken to deter and detect illegal and unreported trade;

e) undertaking education and outreach activities directed towards snake farms, buyers and sellers of live snakes, parts and derivatives, product manufacturers, shippers, brokers and staff from government agencies involved in controlling and monitoring this trade to ensure that snake specimens are traded in compliance with national laws and CITES provisions; and

f) in the case of Parties in Asia, reporting on their efforts in all of these areas to the Secretariat in time for its reporting at the 69th meeting of the Standing Committee.

Decision 17.280

Directed to the Standing Committee

The Standing Committee shall:

a) consider the reports and recommendations from the Animals Committee submitted in accordance with Decision 17.279 and any other relevant information;

b) make recommendation to the Parties, the Animals Committee and the Secretariat as appropriate; and

c) report on the implementation of Decision 17.279 at the 18th meeting of the Conference of the Parties with recommendations for consideration by the Parties, including revisions to Resolution Conf. 17.12 on Conservation, sustainable use of and trade in snakes, if deemed necessary.

Decision 17.281

Directed to the Secretariat

The Secretariat shall communicate bilaterally with relevant Asian Parties to invite them to report on the status of their implementation of Decision 17.278.

Implementation of Decisions 17.278 and 17.281

3. In compliance with Decision 17.281, the CITES Secretariat wrote in June 2017 to relevant Asian Parties concerned with the trade in snakes, inviting them to report on the status of their implementation of Decision 17.278. Based on available trade data and information, the Secretariat considered that this was relevant for: Bangladesh, China, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, Thailand and Viet Nam. For trade in snakes, the most important Asian Parties are China, Indonesia, Malaysia, Thailand and Viet Nam. The Secretariat interacted bilaterally with several of these Parties during the Expert workshop on the making of CITES Non-Detriment Findings (NDFs) for trade in CITES-listed snakes, held in Kuala Lumpur in April 2017 with generous support from Malaysia and Switzerland, and organized by the International Union for Conservation of Nature (IUCN) (see document AC29 Doc. 31.1). This provided an opportunity for China, Indonesia, Malaysia, Thailand and Viet Nam to exchange information and experiences concerning their management of, and trade in snakes, including issues relating to enforcement and controls.

4. At the time of writing this document (early September 2017), the Secretariat had received responses from Cambodia, China, Indonesia and Thailand, for which it is particularly grateful. The replies, in the language and format as received, are presented in Annex 1 to this document.

Summary of information provided

5. **Cambodia** responded comprehensively to the Notification, covering a range of issues relating to the conservation, sustainable use of and trade in snakes in the country. In addition to the specific actions and recommendations referred to under Decision 17.278, the report addresses the biology, conservation, threats, distribution and ecology of snakes in Cambodia. It would therefore be appropriate for the Animals Committee to consider Cambodia's information in the context of its implementation of Decision 17.279.

6. Cambodia states that it has not issued CITES export permits for snakes since 2003, and that since 2002, no authorizations have been given for private enterprises to breed snakes. Between 2011 and 2015, 971 specimens of seven Appendix-II listed snake species were confiscated. It states that there is no substantial local or cross-border snake trade from Cambodia.

7 **China** clarifies that the various elements of Decision 17.278 are being effectively implemented. In the future, the Chinese government will continue to implement this Decision, and strengthen the daily enforcement work and education activities to ensure that snake specimens are traded in compliance with national laws and CITES provisions.

8. **Indonesia** addresses several of the elements mentioned in Decision 17.278, particularly relating to permitting and trade control practices. In its report, Indonesia include species-specific information that the Secretariat will transmit to the Animal Committee for its consideration.

9. **Thailand** provides information on its implementation of the actions and recommendations mentioned in Decision 17.278. It reports having made efforts in all areas concerned.

Discussion

10. Although Decision 17.278 instructs the Secretariat to report on actions taken by Parties in Asia regarding permitting, reporting, enforcement efforts and addressing illegal and unreported trade in snakes, the

Conference of the Parties provided no guidance to the Standing Committee about its consideration of this report.

11. The Secretariat notes that Decision 17.278 is mainly composed of a selection of provisions that feature already in Resolution Conf. 17.12, to which a requirement is added for relevant Parties in Asia to report at the 69th meeting of the Standing Committee (SC69) on their efforts to implement these selected recommendations and actions. Four of the nine Asian Parties with which the Secretariat communicated bilaterally about the implementation of Decision 17.278 (China, Cambodia, Indonesia and Thailand) submitted reports. Malaysia provided extensive information on its management of and trade in snakes in the context of the Review of Significant Trade process (see SC69 document the Review of Significant Trade), and shared information with key snake-trading Parties during the snake NDF workshop that it hosted in April 2017. Likewise, Viet Nam took the opportunity of the NDF workshop to exchange information and experiences with other participating Parties. Viet Nam is also involved in the implementation of Resolution Conf. 17.7 for several snake species that are being bred in captivity in the country. The implementation of CITES in the Lao People's Democratic Republic, including for trade in snakes, is more broadly discussed in the SC 69 document on the Application of Article XIII in the Lao People's Democratic Republic.

12. The Secretariat is of the opinion that relevant Asian Parties have paid significant attention to trade in CITES-listed snakes since CoP17, and that the Parties in the region that are considered to be the most important in this regard generally adhered to, or reinforced pertinent CITES provisions, including those in Decision 17.278. Despite the absence of information from Bangladesh and Myanmar, the Secretariat is therefore of the opinion that Decisions 17.278 and 17.281 can be considered as having been implemented. The Standing Committee may wish to take this into account when reporting to the 18th meeting of the Conference of the Parties, as instructed in Decision 17.280.

Recommendations

13. The Standing Committee is invited to:

    a) take note of this document; and

    b) agree that Decisions 17.278 and 17.281 have been implemented.

Report on Implementation of CoP17 Snakes decisions

Implementation of CoP17

Snakes (Serpentes spp.)

Decision 17.278

The conservation, sustainable use of and trade in snakes in Cambodia

The Ministry of Agriculture Forestry and Fisheries

THE FORESTRY ADMINISTRATION

Department of Wildlife and Biodiversity

Cambodia, 28 August 2017

Table of Contents

1. Introduction

Cambodia ratified the Convention on the International Trade in Endangered Species of Wildlife and Flora (CITES), which prohibited, among other activities, the country's snake trade, in 1997. The subsequent implementation of the more stringent law enforcement that emerged as the result of the entrance into force of Cambodia's Forestry Law in 2002 has led since to a significant reduction in the domestic demand for, as well as illegal and unreported trade of, the country's various species of snakes.

It was during the 17th meeting of CITES that was organized in Johannesburg, South Africa in 2016 that the Parties to CoP17 discussed, under agenda Item 71, the matter of the snake trade and conservation management. In this context, the Parties adopted Resolution Conf. 17.12 on the 'conservation, sustainable use of and trade in snakes.'

Decision 17.278 directed the Parties to CoP 17 to eliminate the important illegal and unreported trade in specimens, whether live or parts and derivatives, of CITES-listed snake species by:

a) ensuring that CITES permits and certificates are properly issued for trade in these specimens:

b) including information on trade in these specimens in their CITES annual reports;

c) ensuring that their annual reports are following the most recent version of the Guidelines for the preparation and submission of CITES annual reports, in compliance with Resolution Conf. 11.17 (Rev. CoP 17) National reports;

d) examining their enforcement efforts regarding trade in these specimens to ensure that adequate steps are taken to deter and detect illegal and unreported trade;

e) undertaking education and outreach activities directed towards snake farms, buyers and sellers of live snakes, parts and derivatives, product manufactures, shippers, brokers and staff from government agencies involved in controlling and monitoring this trade to ensure that snake specimens are traded in compliance with national laws and CITES provisions; and

f) in the case of Parties in Asia, reporting on their efforts in all of these areas to the Secretariat in time for its reporting at the 69th meeting of the Standing Committee.

Decision 17.281 directed the Secretariat to communicate bilaterally with relevant Asian Parties, including Cambodia, to invite them to report on the status of their implementation of Decision 17.278. This report responds to Decision 17.281 by providing information on the legal context, biology and conservation, current status and management, trade, law enforcement and education, and awareness-raising associated with the country's snake populations.

2. Biology and conservation

Reptiles are one of several vertebrate groups that include, worldwide, fish (31,000 species), birds (10,000 species), amphibians (6,500 species), and mammals (5,400 species) (Jenkins et al., 2013; Chapman, 2009). The world's recognized diversity of living reptiles, as of March 2012, was about 9,546 species, of which 25 (0.3%) were categorized as crocodilians, 327 (3.4%) as turtles, and one (0.01%) as the tuatara, which is endemic to New Zealand (Pincheira-Donoso et al., 2013). The remaining 9,193 (96.3%) species were categorized as squamates, which include lizards, snakes, and amphisbaenians and, within that categorization, most diversity was concentrated in the suborder Sauria, which included 5,634 species of lizards, and in the suborder Serpentes, which included 3,378 species of snakes, while there were only 181 amphisbaenians species (suborder Amphisbaenia) (Pincheira-Donoso et al., 2013). The overview of the distribution of Cambodian snake species listed in CITES Appendix II is provided in Table 1.

Table 1. The global distribution of Cambodian snake species listed in CITES Appendix II.

Scientific Name	Range
Naja siamensis Laurenti, 1768	Cambodia, southern Lao PDR, central and all of southern Vietnam, northern and central regions of Thailand and eastern Myanmar.
Naja kaouthia Lesson, 1831	Cambodia, Bangladesh, Bhutan, southern China, northeastern India, southern Lao PDR, Malaysia (Peninsular Malaysia), Myanmar, Nepal, Vietnam, and almost all parts of Thailand.
Ophiophagus hannah Cantor, 1836	Cambodia, Lao PDR, Vietnam, Thailand, Myanmar, Singapore, Peninsular Malaysia, Indonesia, Borneo (Sarawak, Sabah, Brunei, and Kalimantan), Philippines, Pakistan, Bhutan, Nepal, India, Bangladesh, and southern China, including Hong Kong and Hainan.
Phyton reticulatus Schneider, 1801	Western Bangladesh (and possibly adjacent parts of northeast India) south and east through most of Southeast Asia's mainland, encompassing Cambodia, Lao PDR, Thailand, Myanmar, Vietnam, Malaysia, and Singapore, almost throughout Indonesia (absent from New Guinea), and the Philippines.
Phyton bivittatus Kuhl, 1820	Cambodia, Lao PDR, Vietnam, Thailand, Indonesia, Bangladesh, India, Nepal, Myanmar, and China.
Ptyas mucosa Linnaeus, 1758	East to west in Indonesia, Singapore, Malaysia, Vietnam, Cambodia, Lao PDR, Thailand, China (including Hainan and Hong Kong), Myanmar, Bangladesh, Nepal, Sri Lanka, India

		(including Andaman Island), Pakistan, Afghanistan, Turkmenistan, and Iran.

Sources: Barker & Barker, 2008; Groombridge & Luxmoore, 1991; Lim et al., 2011; Chanhome et al., 2011; and Auliya, 2010.

Cambodia has the largest contiguous block of natural forests remaining on the Southeast Asian mainland. These forests comprise components of the highly threatened Indo-Burma Biodiversity Hotspot, which is one of 34 such designations worldwide. The country provides sanctuary to some 1.6% of globally threatened species on the International Union for the Conservation of Nature (IUCN) Red List of Threatened Species. This encompasses 2.5% of globally threatened mammals, 2% of globally threatened birds, and 5% of globally threatened reptiles. Those globally threatened species include 34 species of mammals, 39 species of birds, and 20 species of reptiles (Ministry of Environment, 2014). There are about 176 species of reptiles (Daltry, 2011) that have been documented in Cambodia and more than half (54.55%) of those species are snakes (96 species). Six of the 96 species of snakes, moreover, are currently listed in CITES Appendix II (Table 2). CITES permits are required to export CITES-listed species and specimens.

Table 2. CITES Appendix II and IUCN statuses of Cambodia's snake species.

	Scientific name	Cambodian name	English name	CITES Appendix	IUCN Status
Class	Reptilia				
Order	Serpentes				
Family	**Elaphidae:**				
	Naja siamensis (Laurenti, 1768)	Puors Vekdambok	Indochinese Spitting Cobra	II	VU
	Naja kaouthia (Lesson 1831)	Puors Vekkrobey	Monocled Cobra	II	LC
	Ophiophagus hannah (Cantor, 1836)	Puors Vekroneam	King Cobra	II	VU
	Pythonidae:				
	Phyton reticulatus (Schneider, 1801)	Puors Thlan Thom	Reticulated Python	II	NE
	Phyton bivittatus (Kuhl, 1820)	Puors Thlan Touch	Burmese Python	II	VU
	Colubridae:				
	Ptyas mucosa (Linnaeus, 1758)	Puors Prey Kandol	Oriental Rat Snake	II	NE

IUCN Status: VU = Vulnerable; LC = Least Concern; NE = Not Evaluated.

3. Distribution and habitats of snake populations

The **Indochinese Spitting Cobra (*Naja siamensis*)** has a very wide range throughout mainland Southeast Asia, occurring in Cambodia, southern Lao PDR, central and all of southern Vietnam, northern and central regions of Thailand, and eastern Myanmar (Chanhome et al., 2011). This species has been reported to inhabit lowland and upland forest, including deciduous, disturbed, and open forest, but it is thought to be absent from closed-canopy evergreen forest. It occurs in agricultural areas, including rice paddies (Stuart et al., 2012c) and it consumes a wide variety of prey, including small mammals (rats and mice), frogs, other snakes, and chicks (Chanhome et al., 2011).

The **Monocled Cobra (*Naja kaouthia*)** is native to Cambodia, Bangladesh, Bhutan, southern China, northeastern India, southern Lao PDR, Malaysia (Peninsular Malaysia) Myanmar, Nepal, Vietnam, and almost all parts of Thailand (Chanhome et al., 2011). It is able to adapt to a wide range of habitats, including both natural and anthropogenically-modified environments. It occurs up to 1,000 m in elevation and prefers habitats in moist lowlands associated with water sources, such as rice fields, swamps, and mangroves, although the species is also common in dry evergreen forests, grasslands, shrublands, agricultural lands, near human habitations - including cities, and frequently seeks refuge in termite mounds (Stuart et al., 2012d). The species feeds on a variety of prey, including small mammals, chicks, other snakes, amphibians, rodents, and fish (Chanhome et al., 2011).

The **King Cobra (*Ophiophagus hannah*)** is widely distributed throughout South and Southeast Asia with its native range extending through Cambodia, Lao PDR, Vietnam, Thailand, Myanmar, Singapore, Peninsular Malaysia, Indonesia, Borneo (Sarawak, Sabah, Brunei, and Kalimantan), Philippines, Pakistan, Bhutan, Nepal, India, Bangladesh, and southern China (including Hong Kong and Hainan) (Lim et al., 2011). It resides in a variety of habitats, mostly located in pristine forests, but it also occurs in degraded forests, mangrove swamps, and agricultural areas with remnants of woodland. The species has also been seen swimming in rivers in non-forest land and probably occurs in palm oil plantations and it has also been reported to be encountered in dry high-altitude grasslands in Nepal (Stuart et al., 2012b).

The **Reticulated Python (*Phyton reticulatus*)** is thought to be the world's second largest snake, as well as the longest snake widespread in Asia. The species ranges from western Bangladesh (and possibly adjacent parts of northeast India) south and east through most of Southeast Asia's mainland, including Cambodia, Lao PDR, Thailand, Myanmar, Vietnam, Malaysia, Singapore, almost throughout Indonesia - although it is absent from New Guinea, and the Philippines (Groombridge & Luxmoore, 1991). It inhabits tropical rainforests, wetlands (marshes, swamps, bogs), and grassland forests (Brown, 2016). It also occurs in secondary growth vegetation, or in plantations, and it is said to be fond of water, which often occurs in the vicinity of forest rivers and streams, but it may also be spotted around rice fields and it become a fairly frequent intruder

around human habitations where it is presumed to be feeding on rats (Groombridge & Luxmoore, 1991). The Reticulated Python is a nocturnal hunter, which commonly feeds on small- or medium-sized mammals (monkeys, civets, deer, pigs, rats, etc.) and bird species residing within its geographical range. It also feeds on domestic livestock, especially chickens and goats. It is for this reason that the species is often encountered around people in villages and may be 'persecuted' as a result (Brown, 2016; Groombridge & Luxmoore, 1991).

The **Burmese Python (*Phyton bivittatus*),** which is one of the largest snake species, is widely distributed throughout Southeast Asia. Its native distribution extends into Cambodia, Lao PDR, Vietnam, Thailand, Indonesia, Bangladesh, India, Nepal, Myanmar, and China (Barker & Barker, 2008). It is primarily found in tropical lowlands, including rainforests and mangrove forests, wet grasslands, marshes, wet rocky areas, caves, and crevices, and it is strongly associated with water, including streams, rivers, and lakes (Barker & Barker, 2008). It is more nocturnal than diurnal and it is reported to feed predominantly on mammals (from small to large) as prey, although it also consumes birds, reptiles, amphibians, and rodents (Stuart et al., 2012a).

The **Oriental Rat Snake (*Ptyas mucosa*)** has an extensive geographical range in Southeast Asia. This species is widely distributed from east to west in Indonesia, Singapore, Malaysia, Vietnam, Cambodia, Lao PDR, Thailand, China (including Hainan and Hong Kong), Myanmar, Bangladesh, Nepal, Sri Lanka, India (including Andaman Island), Pakistan, Afghanistan, Turkmenistan, and Iran (Auliya, 2010). Each of its range states, with the exception of Turkmenistan, is a Party to CITES. The Oriental Rat Snake is a diurnal and semi-arboreal species that occurs in a variety of environments. It generally inhabits forest floors and it is found in open terrain adjacent to forest areas and in agricultural lands, as well as near human settlements, and it may also be encountered in sheltered areas beneath the dense vegetation along river banks (Manhas et al., 2016). The Oriental Rat Snake feeds predominantly on amphibians (Bufonidae and Ranidae), rodents, lizards, birds, and even insects. Juveniles prey on frogs and smaller reptiles and shift to mammalian prey as the juveniles grow larger (Auliya, 2010).

4. Threats

The loss of habitats and the conversion of land to other uses are of considerable concern because of their impacts on wildlife conservation practices, including the conservation of Cambodia's snake species. Indeed, habitat degradation, as well as the conversion of forests to agricultural lands, are associated with an increased vulnerability of the country's populations of snakes to illegal capture and hunting. Interviews that have been conducted with snake hunters from the Tonle Sap Lake region are representative of substantial declines in the numbers of snakes. Indeed, the country's python species are often slain for their meat, as well as their skin, which is used in the production of leather, while some cobra species are hunted for personal consumption, while others serve as sources of traditional medicines. There is, nevertheless, little unequivocal information available on the extent of the population declines of these snake species because of both the paucity of research that has been directed to snakes, as well as the irregular and

incomplete monitoring of the status of reptile, especially snake, populations throughout the country.

5. Legal context

The Forestry law (2002), which provides the legal underpinnings for governing forestry and wildlife activities in Cambodia, provides rules and regulations intended to protect endangered wildlife species. It prohibits their possession, stocking, transporting, trading, or importing or exporting. The trading, or importing or exporting, of endangered wildlife species constitutes a Class I offense that is subject to 5-10 years imprisonment. Individuals who commit such transgressions on multiple occasions, moreover, are subject to a doubling of the time of their imprisonment. Those individuals who possess, stock, process, transport, or import or export endangered wildlife species or specimens are punishable via a Class II offense, which is subject to 1-5 years imprisonment and or court fines of 10-100 million riel (~ US$ 2,500 - 25,000).

The species of snakes that are discussed in this report, including the Indochinese Spitting Cobra (*Naja siamensis*), Monocled Cobra (*Naja kaouhia*), King Cobra (*Ophiophagus hannah*), Reticulated Python (*Phyton reticulatus*), Burmese Python (*Phyton bivittatus*), and Oriental Rat Snake (*Phytas mucosus*) are specifically covered under the provisions of Article 48 of the Forestry Law. The species are listed, as well, in the Group of Common Species that are included in Ministerial Declaration No.020 MAFF, dated 25 January 2007.

6. Restrictions on capturing snakes for breeding

Since the Forestry Law entered into force in 2002, the Forestry Administration has not authorized the operation of a single private enterprise to breed snakes. Since there is no expectation that position will soon be altered, moreover, there continues to be no reason for the government to establish a series of quotas for regulating the numbers of snakes that would be allowed to be captured to use as ‘feed stocks’ in such enterprises.

7. The snake trade

The CITES Management Authority of Cambodia has not issued a CITES approval document for exporting snakes since 2003 and, moreover, there has been no substantial local or cross-border snake trading originating in Cambodia.

8. Enforcement

The Cambodia Forestry Administration has collaborated with the Wildlife Alliance conservation organization to establish a Wildlife Rapid Rescue Team (WRRT). The operations of the WRRT are primarily directed to providing rapid responses to prevent, as well as deter, wildfire crimes, especially those associated with the illegal wildlife trade, and to rescuing captured, as well as trafficked, wildlife. During the period from 2011 to 2015, there were 971 specimens, whether

live or dead, of snakes, including 770 Burmese Python, 51 Reticulated Python, 32 Monocled Cobra, 17 King Cobra, 12 Indochinese Spitting Cobra, 83 Oriental Rat Snake, and 6 Common Rat Snake that were confiscated by the WRRT (Table 3).

Table 3. Snakes confiscated by the Wildlife Rapid Rescue Team: 2011 - 2015.

Nº	Species	Number of Live or Dead Specimens					
		2015	2014	2013	2012	2011	Total
1	Burmese Python	198	127	180	154	111	770
2	Reticulated Python	4	8	9	15	15	51
3	Monocled Cobra	2	5	7	7	11	32
4	King Cobra	3	0	2	10	2	17
5	Indochinese Spitting Cobra	2	2	0	3	5	12
6	Oriental Rat Snake	13	13	21	19	17	83
7	Common Rat Snake	2	0	1	1	2	6
	TOTAL	**224**	**155**	**220**	**209**	**163**	**971**

Source: Wildlife Rapid Rescue Team.

9. Education and awareness-raising

In its awareness-raising campaigns, in which local people assume an essential role, the Cambodia Forestry Administration, in association with its development partners and other non-governmental conservation organizations, uses leaflets, posters, and videos, as well as workshops and meetings, to increase public awareness of the positive contributions of wildlife. These messages are often conveyed by means of pictures that have been inserted into booklets or impressed on bags or hand fans that have been distributed to target groups, including groups of villagers or school children. Local people are introduced to the underlying purposes for wildlife conservation preceding the distribution of these materials.

These awareness-raising efforts are conducted by mobile teams that present wildlife documentaries in the evening in the more remote areas of the country where the country's protected areas are located. There are video clips that are also shown at night, which is the most suitable time to elaborate the underlying reasons for supporting wildlife conservation. This approach has proven to be particularly effective in rural communities where the concepts that are conveyed are not too complex to understand when delivered through these mediums. One of the most influential components of awareness-raising is associated with on-going initiatives to reduce the consumption of bushmeat.

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The Endangered Species Import and Export Management Office of the People's Republic of China

Ref: 2017-AL-008

August 31th, 2017

To:
Mr. Tom De Meulenaer
Chief, Scientific Support Team
Geneva, Switzerland
Email: tom.de-meulenaer@cites.org

Subject: Implementation of Decision 17.278 on snakes of China

Dear Mr. Meulenaer,

First of all, I would like to extend my gratitude for your continuous support to the implementation of CITES in China.

In response to your letter dated 22 June 2017 on implementation of Decisions 17.278 on snakes, I would like to provide you with the following information.

a) All CITES permits and certificates for snake specimens are properly issued by CITES management agency of China.
b) All required information on trade in snake specimens has been included in CITES annual reports.
c) Our annual reports follow the most recent version of the Guidelines for the preparation and submission of CITES annual reports, in compliance with Resolution Conf. 11. 17 (Rev. CoP17) on National reports.
d) Enforcement efforts by China Customs and Forest Public Security Bureau are implemented strictly following CITES provisions, and detection technology is improving constantly. Five illegal cases of snake smuggling have been seized by China Customs since 2015. Since the beginning of this year, the Forest Public Security Bureau has detected and dealt with 650 illegal cases of snakes, involving 31786 snakes, 904 people, and 50.91 million yuan.
e) The *Notification on strengthening protection of saiga, pangolin, and rare snake resources and management of their products as medicine* was jointly issued by the State Forestry Administration, the People's Republic of China Ministry of Health, the People's Republic of China State Administration for Industry and Commerce, the State Food and Drug Administration and the State Administration of

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Traditional Chinese Medicine. The notification aimed to combat wild hunting activities and enhance the supervision of rare snakes.

f) Various education and outreach activities such as "Wildlife Conservation Awareness Month", "World Wildlife Day", "Wild Animal Breeding and Using Management Training Course" are carried out every year. The laws and regulations on wildlife conservation and scientific knowledge of snakes are widely spread by media and Internet for ordinary people. Many training and education courses of wildlife protection to wildlife conservation department are carried out regularly to improve their technical and management level.

g) The State Forestry Administration actively organizes investigation and assessment of the status of endangered snakes, and includes more snake species in the list of national key protected wild animals for better conserved.

In the future, the Chinese government will continue to implement the Decision 17.278, and strengthen the daily enforcement work and education activities to ensure that snake specimens will be traded in compliance with national laws and CITES provisions.

Please feel free to contact me if you have any questions or require any further information about this matter.

Yours sincerely,

Dr. Mr. Meng Xianlin
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Information of the Range States on Conservation, Sustainable Use and Trade of Snake in Indonesia

August 2017

This report has been prepared by the CITES Management Authority and Scientific Authority of Indonesia pursuant to Decision 17.276 and 17.278. Please direct all comments or inquiries to:

Directorate General of Ecosystem and Nature Conservation
Ministry of Environment and Forestry
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A. Snake Trade Conservation and Management

Indonesia concerns the continuity of export of all species including snakes, thus put effort on the management of trade through quota system to satisfy Article IV of the CITES Convention, which meant demonstrating no detriment to the wild population.

Quotas for all reptiles including snakes subject to export in Indonesia are carefully set up. Management Authority officers in each Province establish proposed harvest levels, in the field, where harvesting takes place, which are then reviewed and assessed further by CITES Scientific Authority (Indonesian Institute of Science, LIPI). Various parameters, including environmental conditions, are now used to set up quotas. In setting the quotas Scientific Authority involves individuals from a wide range of expertise, including scientists from other Research Organizations, Universities and NGOs. Once quotas are finalized LIPI submits them back to Directorate General of Ecosystem and Nature Conservation (CITES Management Authority), which then issues an annual decree on the national allowable harvest. The decree identifies the allowable harvest of each species down to the Province level.

Individual species harvest quotas are based on a range of available data, including information on the biology, population, and distribution of the species, general land-use and potential threats in specific areas. For example as a precautionary measure, quotas for the species in 2015 were reduced in response to extensive forest fires in Indonesia in 2015. The export quota is typically established as 90% of the total harvest: domestic trade is around 10% (Siswomartono, 1998).

The captive breed program for some species of snakes has been established. The company must be registered in the Indonesia CITES MA. The operation of captive bred company must also comply with national regulation, according to Government regulation No. 19/ Menhut-II/ 2005 concerning Captive Bred operation on wild fauna and flora.

B. Management and Monitoring

1. Harvest Controls and Internal Trade Monitoring

The provincial offices of the Management Authority (BKSDA) control and enforce harvest/ collection permits, and implement quota management and monitoring, for CITES-listed species in all administrative jurisdictions. In accordance with the Decree of the Minister of Forestry No. 447 of 2003 the BKSDA office will issue permits to collect species included in the quota list in the field based on the quota allocated for each respective province. All specimens harvested from the habitat are officially registered by the Sub-provincial Section Offices of BKSDA (Districts office of BKSDA) who then, report back to the provincial BKSDA.

For domestic transport, the specimens must be covered by permits issued by BKSDA or its Section Offices. To facilitate better control, the domestic transport permit is, started from January 2005, standardized throughout Indonesia. All permits (collection and domestic transport permits) are required to be reported to central level, which will improve monitoring of internal (domestic) trade. For international trade, there are already a limited numbers of import/ export points nominated for Indonesia's CITES trade (see CITES Notification 1999/79).

Monitoring the chain of custody between source regions and collection points within Indonesia is theoretically possible to a certain degree of accuracy. Each province is divided into a number of BKSDA jurisdictions which will be able to track the legality of the specimens.

Standardized domestic transport permits are issued by BKSDA, in which five separate copies must accompany internal shipments within Indonesia. In addition, there should be a monthly report by BKSDA offices to report levels of internal transport to the central Directorate General of Ecosystem and Nature Conservation (DG KSDAE) office (as the CITES MA). The five copies are: the first copy must follow the specimen; the second copy stays as the file of BKSDA; the third copy is sent to the central office (DG KSDAE) as the file for DG KSDAE and used for crosschecking with the original which is enclosed with application for export; the fourth copy is file for BKSDA destination and used for cross checking with the original when the shipment has arrived; and fifth copy is for the Section of BKSDA.

2. National Legislation and Trade Control

The harvest and trade of all CITES Appendix II species, must be strictly controlled-in terms of harvest, domestic transport and export – by the DG KSDAE as the CITES Management Authority. This follows Decree of the Minister of Forestry Number 447/Kpts-II/2003 concerning the Administration Directive of Harvest and Capture and Distribution of the Specimens of Wild Plant and Animals Species**.** The annual national quota is set under this Decree by the Director General of KSDAE, and the Provincial Offices of the KSDAE (i.e. the BKSDA) issue harvest permits, whose totals cannot exceed the amounts which have been allocated as the provincial quota. Permits for domestic transport are also issued by the provincial office in accordance with the annual quota and with reference to harvest permits.

Collectors and exporters must be licensed and registered at the Directorate General of KSDAE in order to apply for CITES export permits. All shipments are verified and checked by the provincial office of KSDAE (BKSDA) whose officers are posted in the designated international ports.

Any violation to this regulation is sanctioned based on the provisions of the Government Regulation No. 8 of 1999 concerning Wild Animals and Plants Species Utilization, which is the implementation of the Act No. 5 of 1990 concerning Conservation of Living Resources and Their Ecosystems. The Government Regulation No. 8 of 1999 provides penalties for smuggling/ misdeclaration or trade that is not inaccordance with the provision of the regulation and may be liable to imprisonement (in accordance with the Customs and Excise Law) and or fines of maximum IDR 250 million (about USD 27,000).

To combat illegal trade of wildlife including snakes, government of Indonesia also conduct several approach such as capacity building for relevant law enforcement officer (Ranger, Police, Custom, Quarantine, Judge, Private, etc), campaign/ public awareness, establishment of community based patrol, development of forensic technique, revision process of Act No. 5 of 1990 which one of the revision point is to increase in sanction/ penalty to create deterrent effect, strengthened partnership with local and international NGO as well as established bilateral, regional and international cooperation.

3. Protection of the species: Protected Areas and other Measures

Harvest of any species within gazetted Protected Areas, is prohibited under Act No. 5 of 1990. Anybody entering or trespassing in Protected Areas without permits may be prosecuted. Despite some reports on encroachment into protected areas by local people, protected areas would be the perfect place to safeguard from illegal harvesting of any species. Most of primary forests as one of suitable habitat of snakes are located in protected area. Indonesia has gazetted total 521 units of protected areas covering about 27 million hectares (MoEF, 2016).

These are managed in several categories based on IUCN criteria, namely National Parks, Nature Reserves, Game Reserves and Recreational Parks. Other protected area categories managed by the Government of Indonesia include: Hunting Parks and Grand Forest Parks. Except Grand Forest Parks, all categories of protected areas are managed by central government (Ministry of Forestry), therefore they are under direct control of the Management Authority. Protected Areas in Indonesia are generally well-managed, in terms of the monetary and human resources that have been put in the management. However, in many instances, encroachment in the forms of wildlife poaching, illegal logging and land encroachment for shifting agriculture, has become major issue in the management effectiveness of Protected Areas. Therefore, the current resources have been utilized more to undertake enforcement.

The species target with regards to Decision 17.26:

C. Papuan Green Python (*Morelia viridis*)

1. Taxonomy

Phylum : Chordata
Sub Phylum : Vertebrata
Class : Reptilia
Ordo : Squamata
Sub Ordo : Serpentes
Family: Pythonidae
Genus: Morelia
Species: *Morelia viridis*

2. Distribution, Population Size, Status and Trends

Morelia viridis is widespread in all Papuan regions including several adjacent islands such as Aru, Yapen, Raja Ampat (Indonesia). Conservation status of *Morelia viridis* is protected under Indonesian law. The use of commercial purposes only allowed from captive breeding program of F2. The size of wild population is unknown, however this species is well recognized by locals as Ular Hijau.

3. Sustainability of Harvest

The wild harvest quota only allowed for parental stock (f0).

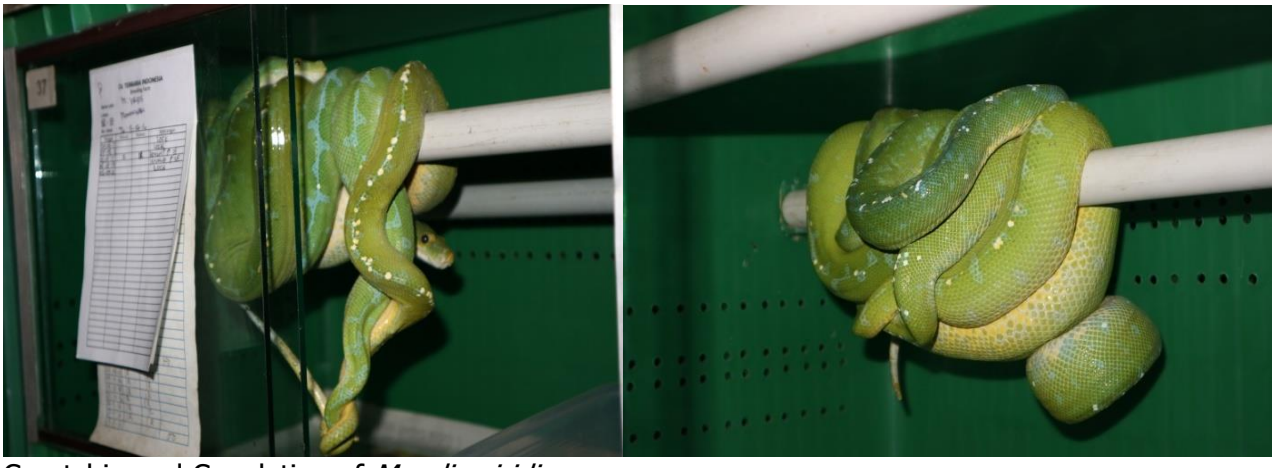
4. Captive Breeding

Trade of this species only allow from captive breeding facility. The captive bred companies are registered in the Indonesia CITES MA. Registration mechanism of the captive bred operation of CITES listed is according to Government regulation No. 19/Menhut-II/2005 concerning Captive Bred operation on wild fauna and flora.

Captive breed effort of this species is not difficult, and successful captive breeding has been reported in several companies.

The facility of captive breeding
Source : CITES Management Authority of Indonesia, 2017

Courtship and Copulation of *Morelia viridis*



Courtship and Copulation of *Morelia viridis*

Egg Deposition

The hatching rate of ranching program is 80%, survival rate ranged from 85 %. With this achievement, 100 individual as set in the national quota can be full filled only from 3-5 female of ranching program.

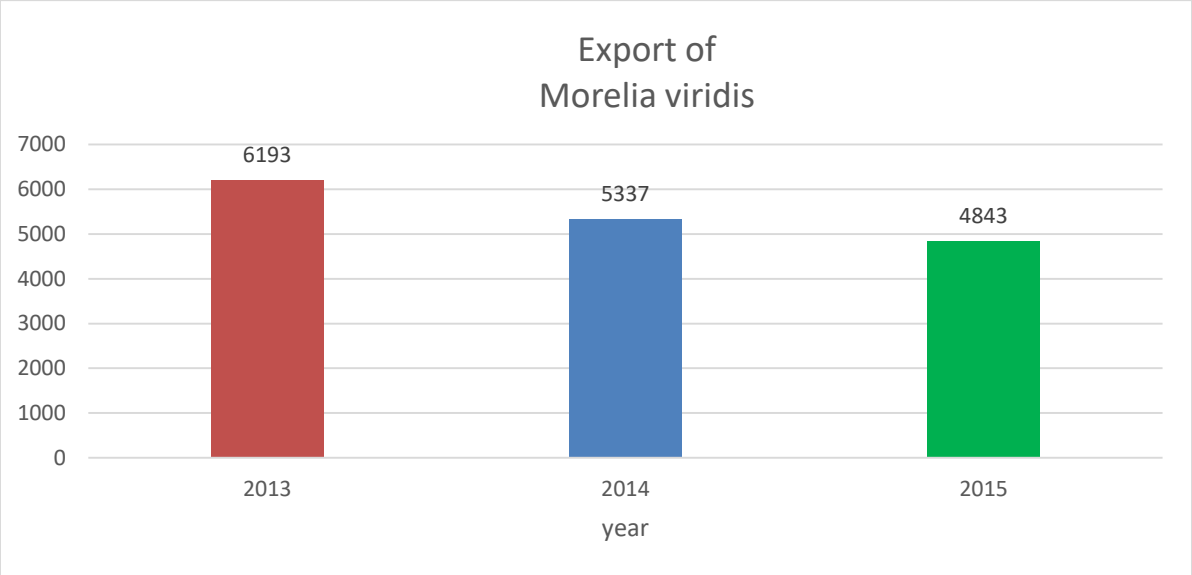
Removing eggs from deposition place (artificial nest) into incubator

Hatchling *Morelia viridis*

For monitoring, the CITES Management Authority (MA) designed a tool to control and monitor the production of a company namely Maximum Estimated Production (MEP). MEP is an estimate of breeding success for a particular species, by a particular breeder over a forthcoming 1 year period. Each breeder has to submit MEP of this species and then the CITES MA subsequently checks those claims, taking into consideration the previous breeding success of the company, and the biological of the species concerned.

5. Trade data

Export of *Morelia viridis* live specimen from Indonesia from year 2013-2015.



Source : CITES Management Authority of Indonesia, 2017

D. Boelens Python (*Morelia boeleni)*

1. Taxonomy

Phylum : Chordata
Sub Phylum : Vertebrata
Class : Reptilia
Ordo : Squamata
Sub Ordo : Serpentes
Family: Pythonidae
Genus: Morelia
Species: *Morelia boeleni*

2. Distribution, Population Size, Status and Trends

The species ristrictly distributed in the highlands of Wamena (Cyclops Mt.) of Papua Indonesia and Papua New Guinea (more than 1000 m asl). In Papua (Wamena), Boelen python usually was found in the habitat type of Rhododendron forest in elevation about 2000 m asl. The species mostly preys on mammals, bird, lizards.

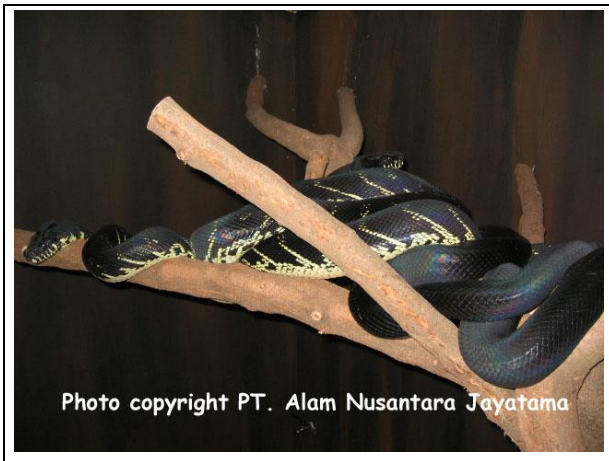
The size of wild population is unknown, however this species is well recognized by locals in Wamena as Ular Hitam. This species is not protected under Indonesian law (PP 7), however the revision of the law is on going which uplisted this species into list of protected species (LIPI 2017).

3. Sustainability of Harvest

The wild harvest quota only allowed for parental stock (f0).

4. Captive Breeding

Trade of this species only allow from captive breeding facility. The captive bred companies are registered in the Indonesia CITES MA. Although the captive breed effort of this species is difficult, the effort to initiate the program is important.

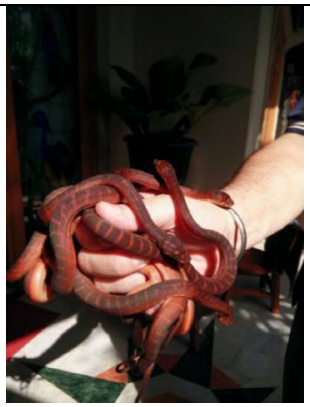


A pair of Boelens Python

The hatching rate of ranching program is 90%, survival rate ranged from 80 to 90%. With this achievement, 100 individual as set in the national quota can be full filled only from 3-5 female of ranching program.

Courtship and Copulation

Hatching of Boelen Python

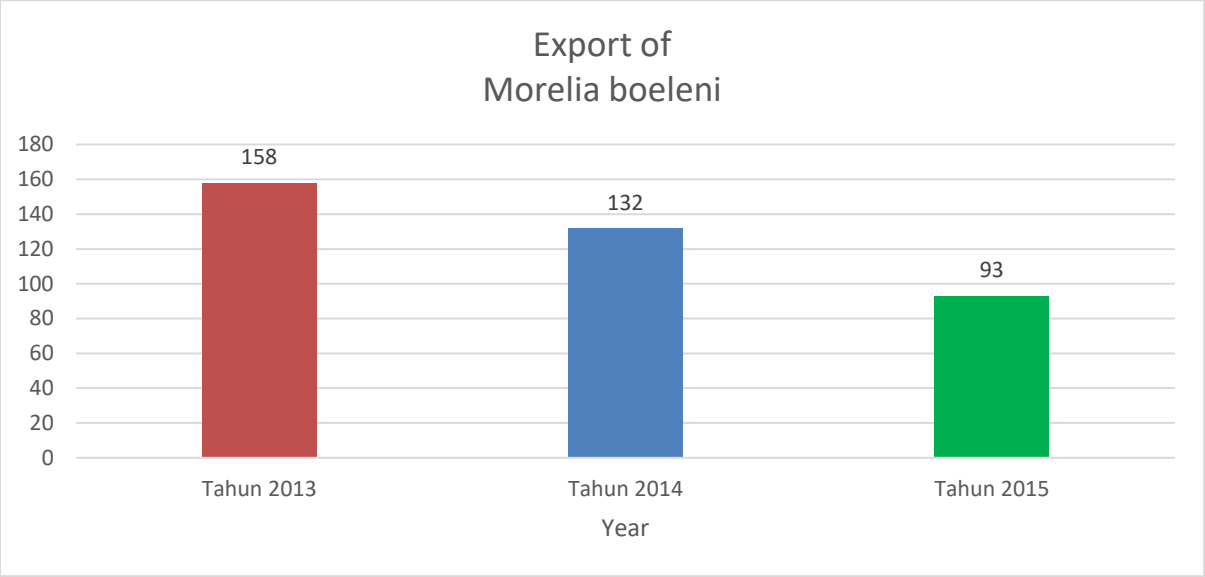


Babies of Boelen Python, one week after hatching

For monitoring, the CITES Management Authority (MA) designed a tool to control and monitor the production of a company namely Maximum Estimated Production (MEP). MEP is an estimate of breeding success for a particular species, by a particular breeder over a forthcoming 1 year period. Each breeder has to submit MEP of this species and then the CITES MA subsequently checks those claims, taking into consideration the previous breeding success of the company, and the biological of the species concerned.

5. Trade data

Export of *Morelia boeleni* live specimen from Indonesia from year 2013 to 2015.



Source : CITES Management Authority of Indonesia, 2017

E. Law enforcement Effort

1. Data cases/ confiscation and legal process.

The table below illustrate law enforcement effort on Green Tree Python (*Morelia viridis*) during 2012-2017.

No.	Date	Wildlife	Specimen Type	Total Individu	Location	Crime Type	Legal Process
1	8/22/2012	Green Tree Python	Live	13	Jakarta	Online Trade	Verdicted
2	7/6/2015	Green Tree Python	Live	30	Jakarta	Online Trade	Verdicted
3	4/15/2016	Green Tree Python	Live	3	Sorong	Trading	Verdicted
4	5/16/2017	Green Tree Python	live	3	Tangerang	smuggling	Process
5	6/19/2017	Green Tree Python	Live	10	Jakarta	smuggling	Process

(Source: MoEF & WCS-IP)

2. Documentation.

Confisticated specimens of *Morelia viridis* in Soekarno Hatta Airport (2017)

F. Contact Details of any Relevant Experts

1. Dr. Amir Hamidy: Research Centre of Biology Indonesian Institute of Sciences, email: hamidyamir@gmail.com, biologi@mail.lipi.go.id.
2. Mrs. Mumpuni: Research Centre of Biology Indonesian Institute of Sciences, email: mumpuni.sc@gmail.com, biologi@mail.lipi.go.id.
3. Mr. Awal Riyanto: Research Centre of Biology Indonesian Institute of Sciences, email: awal_lizards@yahoo.com, biologi@mail.lipi.go.id.
4. Ms. Ratna Kusuma Sari, Directorate of Biodiversity Conservation for CITES MA Indonesia, email: macites@menlhk.go.id, subditkonvensi.kkh@gmail.com
5. Agung Nugroho, Directorate of Biodiversity Conservation for CITES MA Indonesia, email: macites@menlhk.go.id, subditkonvensi.kkh@gmail.com

Thailand's efforts regarding CITES-listed snake species under Decision 17.278

a) ensuring that CITES permits and certificates are properly issued for trade in these specimens;

- Import of CITES-listed snake species in all three appendices are required CITES import permit in addition to export permit/certificate issued by exporting state. Export permit from Thailand is needed for all exports of CITES-listed snake species.

b) including information on trade in these specimens in their CITES annual reports;

- Trade in specimens of CITES-listed snakes exported from and imported into Thailand will be included in the Annual Report. Most of the exports are involved with skins and skin products of native pythons originated from registered breeding operations, and those of wild cobras controlled by export quota. Whereas live snakes are frequently imported as pet.

c) ensuring that their annual reports are following the most recent version of the Guidelines for the preparation and submission of CITES annual reports, in compliance with Resolution Conf. 11.17 (Rev. CoP17) on National reports;

- Annual report year 2015 is under preparation as followed the recent Guidelines.

d) examining their enforcement efforts regarding trade in these specimens to ensure - that adequate steps are taken to deter and detect illegal and unreported trade;

- Breeding farms of two native pythons, *Python reticulatus* and *Python molurus bivittatus*, have been controlled under the Wild Animal Reservation and Protection Act. Farms are required to report changes in quantities of pythons in their farms, and inspection then will be taken by DNP. Traders have to maintain their trade records, as well as reports of skin product manufacturing if applicable.
- Since 1990, Thai Cabinet has prohibited export of all snakes in live form. Therefore no live snake generally is allowed to be exported thereafter.
- Imports and exports of all CITES-listed snakes are protected under Wild Animal Reservation and Protection Act.
- In year 2016-2017, Thailand confiscated 11 live cobras and 17 specimens of pythons without CITES permits. Penalties for illegal export and import are up to 4 years in prison or 40,000 Baht in fine sentence, or both.

e) undertaking education and outreach activities directed towards snake farms, buyers and sellers of live snakes, parts and derivatives, product manufacturers, shippers, brokers and staff from government agencies involved in controlling and monitoring this trade to ensure that snake specimens are traded in compliance with national laws and CITES provisions.

- Department of Fisheries (DoF) organized a training on identification of aquatic species protected under the Wild Animal Reservation and Protection Act during January 2016. This opened for participation of enforcement officers from different agencies such as Police, Customs, DNP and DoF to support their enforcement activities related to aquatic species.
- Information on related laws and regulations is routinely communicated to relevant stakeholders such as snake farms, exporters, importers, travelers.